



# Analytical Laboratory

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McGuire Nuclear Complex - MG03A2  
Phone: 980-875-5245 Fax: 980-875-4349

## Order Summary Report

**Order Number:** J13010004

Project Name: NPDES - MONTHLY

Customer Name(s): Craig Mercer, Mark J Harper, Todd Spade, Tara Thomas, Matthew Hoyt

Customer Address: 11021 BROWER RD.

NORTH BEND, OH 45052

Lab Contact: Theron T James Phone: 980-875-4795

**Report Authorized By:** \_\_\_\_\_ **Date:** 1/10/2013  
(Signature)

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### Program Comments:

Please contact the Program Manager (Theron T James) with any questions regarding this report.

### Data Flags & Calculations:

Any analytical tests or individual analytes within a test flagged with a Qualifier indicate a deviation from the method quality system or quality control requirement. The qualifier description is found at the end of the Certificate of Analysis (sample results) under the qualifiers heading. All results are reported on a dry weight basis unless otherwise noted. Subcontracted data included on the Duke Certificate of Analysis is to be used as information only. Certified vendor results can be found in the subcontracted lab final report. Duke Energy Analytical Laboratory subcontracts analyses to other vendor laboratories that have been qualified by Duke Energy to perform these analyses except where noted.

### Data Package:

This data package includes analytical results that are applicable only to the samples described in this narrative. An estimation of the uncertainty of measurement for the results in the report is available upon request. This report shall not be reproduced, except in full, without the written consent of the Analytical Laboratory. Please contact the Analytical laboratory with any questions. The order of individual sections within this report is as follows:

*Job Summary Report, Sample Identification, Technical Validation of Data Package, Analytical Laboratory Certificate of Analysis, Analytical Laboratory QC Reports, Sub-contracted Laboratory Results, Customer Specific Data Sheets, Reports & Documentation, Customer Database Entries, Test Case Narratives, Chain of Custody (COC)*

### Certification:

The Analytical Laboratory holds the following State Certifications : North Carolina (DENR) Certificate #248, South Carolina (DHEC) Laboratory ID # 99005. Contact the Analytical Laboratory for definitive information about the certification status of specific methods.

*The results in this report meet NELAP requirements through New York State Department of Health Certification # 11717.. Certified parameters are designated with an "N" in the analytical report.*

## Sample ID's & Descriptions:

Sample ID	Plant/Station	Collection Date and Time	Collected By	Sample Description
2013000024	MIAMI-FORT	02-Jan-13 10:00 AM	Mark Harper	OUTFALL 002
2013000025	MIAMI-FORT	02-Jan-13 9:30 AM	Mark Harper	OUTFALL 608
2 Total Samples				

## Technical Validation Review

### Checklist:

COC and .pdf report are in agreement with sample totals and analyses (compliance programs and procedures).

☒ Yes

☐ No

All Results are less than the laboratory reporting limits.

☐ Yes

☒ No

All laboratory QA/QC requirements are acceptable.

☒ Yes

☐ No

### Report Sections Included:

☒ Job Summary Report

☒ Sample Identification

☒ Technical Validation of Data Package

☒ Analytical Laboratory Certificate of Analysis

☐ Analytical Laboratory QC Report

☐ Sub-contracted Laboratory Results

☐ Customer Specific Data Sheets, Reports, & Documentation

☐ Customer Database Entries

☒ Chain of Custody

☐ Electronic Data Deliverable (EDD) Sent Separately

Reviewed By: Mary Ann Ogle

Date: 1/10/2013

# Certificate of Laboratory Analysis

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Order # J13010004

Site: OUTFALL 002

Collection Date: 02-Jan-13 10:00 AM

Sample #: 2013000024

Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<b>TOTAL DISSOLVED SOLIDS</b>								
TDS	760	mg/L	N	40	1	SM2540C	01/07/2013 15:50	SWILLI3

Site: OUTFALL 608

Collection Date: 02-Jan-13 9:30 AM

Sample #: 2013000025

Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<b>ALKALINITY (FIXED END POINT 4.5)</b>								
Alkalinity (mg/L CaCO <sub>3</sub> )	2100	mg/L (CaCO <sub>3</sub> )	N	0.1	1	SM2320B	01/04/2013 11:30	TJA7067
<b>INORGANIC IONS BY IC</b>								
Chloride	6700	mg/L	N	100	1000	EPA 300.0	01/03/2013 14:16	BGN9034
Fluoride	22	mg/L	N	5	50	EPA 300.0	01/03/2013 14:16	BGN9034
Sulfate	6600	mg/L	N	100	1000	EPA 300.0	01/03/2013 14:16	BGN9034
<b>TOTAL METALS BY ICP</b>								
Boron (B)	631	mg/L	M4; N	2.5	50	EPA 200.7	01/07/2013 09:35	MHH7131
Iron (Fe)	0.039	mg/L	N	0.01	1	EPA 200.7	01/07/2013 09:35	MHH7131
Manganese (Mn)	0.341	mg/L	N	0.005	1	EPA 200.7	01/07/2013 09:35	MHH7131
<b>TOTAL RECOVERABLE METALS BY ICP-MS</b>								
Arsenic (As)	< 20	ug/L	N	20	1	EPA 200.8	01/07/2013 14:47	KRICAR
Barium (Ba)	145	ug/L	N	20	1	EPA 200.8	01/07/2013 14:47	KRICAR
Cadmium (Cd)	< 20	ug/L	N	20	1	EPA 200.8	01/07/2013 14:47	KRICAR
Chromium (Cr)	< 20	ug/L	N	20	1	EPA 200.8	01/07/2013 14:47	KRICAR
Copper (Cu)	< 20	ug/L	N	20	1	EPA 200.8	01/07/2013 14:47	KRICAR
Lead (Pb)	< 20	ug/L	N	20	1	EPA 200.8	01/07/2013 14:47	KRICAR
Zinc (Zn)	< 20	ug/L	B1; N	20	1	EPA 200.8	01/07/2013 14:47	KRICAR
<b>TOTAL DISSOLVED SOLIDS</b>								
TDS	26000	mg/L	N	100	1	SM2540C	01/07/2013 15:50	SWILLI3
<b>TOTAL SUSPENDED SOLIDS</b>								
TSS	9.0	mg/L	N	5	1	SM2540D	01/07/2013 09:11	SWILLI3

## Qualifiers:

- B1** Target analyte detected in method blank at or above the reporting limit. Target analyte concentration in sample was greater than 10X the concentration of the target analyte detected in the method blank. Analyte concentration in sample is not affected by contamination.

# Certificate of Laboratory Analysis

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- M4** The spike recovery value was unusable since the analyte concentration in the sample was disproportionate to the spike level. The associated Laboratory Control Spike recovery was acceptable.



